SOME PHILADELPHIA ORNITHOLOGICAL COLLEC-TIONS AND COLLECTORS, 1784–1850.¹

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Ornithological study has for so many years centered around the city of Washington and the National Museum, that many of our ornithologists have well nigh forgotten, while some perhaps have never known, that during the first half of the present century Philadelphia stood preëminent in the American ornithological world.

The large majority of our early ornithologists were Philadelphians, either by birth or residence, and with the exception of such works as the 'Birds of America' and the several Reports of Government Exploring Expeditions, nearly all the contributions to ornithology appeared in the 'Journal' and 'Proceedings' of the Academy of Natural Sciences of Philadelphia. In fact, every American ornithologist of note, from Audubon to Baird, and the various naturalists of the Pacific R. R. Surveys, appears as a contributor to these journals.

The ornithological collection of the Philadelphia Academy in 1850 was not only far ahead of any other in America but was considered by such an eminent authority as Philip Lutley Sclater to be "superior to that of any museum in Europe and therefore the most perfect in existence."

In view of the interest that attaches to these early collections which are so closely associated with the beginnings of bird study in America, it has seemed to me that it would be interesting and fitting to the present occasion to look a little into the history of the collections and of the men to whom they owe their existence.

Alexander Wilson, from whom systematic American ornithology may be said to date, came to Philadephia in 1794, and though it was fourteen years before the first part of his work appeared in print, he had already announced his intention of making "a collection of all our finest birds" as early as 1803.

¹ Read before the Sixteenth Congress of the American Ornithologists' Union, Washington, D. C., Nov. 15, 1898.

The Philadelphia Academy was not founded until the year before Wilson's death in 1813, so that he had no association with it as he undoubtedly would have had had he lived longer.

The only museum in Philadelphia during his time was the famous Peale's Museum. Of this he makes frequent mention in his writings, and here he deposited many of the specimens which served as the types of the new species described and figured in the 'American Ornithology.'

The birds secured by Thomas Say on Major Long's expedition to the Rocky Mountains in 1819-20 seem to have likewise been deposited in Peale's Museum, as Bonaparte in his continuation of Wilson's work figured several of Say's birds and refers by numbers to specimens in the museum. The single fact that Wilson's and Say's types were included in the Peale collection makes its history of much importance to us to-day, but the many other historical associations connected with the museum greatly increase its interest.

Peale's Museum was originally opened in 1784, then consisting mainly of the paintings of the proprietor and artist, Charles Wilson Peale; later from time to time various natural curiosities were added, and the museum was moved several times as more commodious quarters were required. In 1821 its name was changed to the Philadelphia Museum, and it was under the management of a company composed mainly of Peale's sons, including Titian Peale, the ornithologist of the U.S. Exploring Expedition.

In the early days of the museum Peale attempted to open it on Sundays, which naturally brought forth heavy criticism from the public press, to counteract which he had a sign prepared for display on the Sabbath, bearing the legend: "Here the wonderful works of the Divinity may be contemplated with pleasure and advantage. Let no one enter to-day with any other view."

In 1794 we learn that a small zoölogical garden was started in connection with the museum proper, the chief attraction being a Bald Eagle, with a sign "Feed me well and I'll live 100 years," from which we infer that the animals were largely dependent for subsistence upon the liberality of the visitors.

One of the original catalogues published in April, 1805, and

still preserved in the library of the Historical Society of Pennsylvania, contains an interesting account of the collections, and as many of us are concerned with beasts of the earth as well as birds of the air I may be pardoned for quoting the paragraph on the mammals as well as that relating to the birds:—

"Among the most remarkable of the Quadrupeds are—The Long-clawed Grisly Bear from the source of the Missouri. The American Buffaloe or Bison, the Great Anteater (7 ft. 7 ins from snout to tip of tail). The Ourang Outang or wild man of the woods. The crested Porcupine, some of whose quills measure 18 ins, the American and New Holland ditto, Madagascar Bats (measuring 4 ft. from tip to tip). The Hooded Bat etc etc. The Lama or Camel of South America, the untameable Hyaena and fierce Jackall. American Elks, the Picary remarkable for a secretory organ on its back. The slow moving Bradypus or Sloth, Antelopes from Africa, the Indian Musk of astonishing agility and the Kangaroo or Opossum from Botany Bay, etc."

"All the birds are in glass cases, the insides of which are painted to represent appropriate scenery, Mountains, Plains, or Waters, the birds being placed on branches or artificial rocks.

"There are now in the collection (including many nondescripts) perhaps all the birds belonging to the middle, many of which likewise belong to the northern and southern States and a considerable number from South America, Europe, Africa, Asia and New Holland and the newly discovered islands in the south seas. The number exceeds 760 without the admission of any duplicates, contained in 140 cases."

One of the most famous attractions of Peale's Museum was the mounted skeleton of a mastodon, erected by one of Peale's sons, who celebrated the completion of the work by given a dinner to twelve of his friends, the table as well as a piano being placed on a platform inside the body cavity and supported on the ribs.

Like many similar undertakings, the Museum company by a too lavish expenditure of money on their last building became involved in debt and after a vain effort to make the museum self-sustaining by adding musical and other attractions they were finally compelled to close the doors in 1844.

The decline of the museum and its passage through successive

stages of museum proper, lecture hall, music hall, and variety stage, seems to have been so gradual that the final closing of the enterprise caused little comment. No record has been kept of the disposal of the specimens, and all efforts to trace the history of the Wilson and Say types have proved futile. All that seems to be known is that part of the natural history material was purchased by P. T. Barnum and was later burnt in his memorable fire in New York while other parts of the collections went to Boston, Baltimore, and Lancaster. The only types from the Peale collections that have been preserved, so far as I am aware, are Wilson's Broad-winged Hawk and Mississippi Kite, both of which are in the Philadelphia Academy labelled as having been obtained by exchange from Peale's Museum.

By 1825 the Academy of Natural Sciences was sharing the attention of the scientific world with the older Museum of Peale. It had become firmly established and was doing excellent work, not only in ornithology but in many other branches, and had enrolled in its membership all the prominent American naturalists of the time, many of whom are familiar to us to-day as pioneers in their respective specialties.

Curiously enough there is preserved an account of a meeting of the Academy held at this time, written by Dr. Edmund Porter of Frenchtown, N. J., in a letter to Dr. Thomas Miner of Haddam, Conn., dated Oct. 25, 1825, from which we can gain some idea of the personnel of the Academy meetings of this period. Dr. Porter writes: "A few evenings since I was associated with a society of gentlemen, members of the Academy of Natural Sciences. There were present fifteen or twenty. Among the number was La Suer, Rafanesque, Say, Peale, Pattison, Harlan and Chas. Lucien Bonaparte.

"Among this collection life was most strikingly exemplified.—
La Suer, with a countenance weather-beaten and worn, looked on, for the muscles of his ironbound visage seemed as incapable of motion, as those on the medals, struck in the age of Julius Caesar. Rafanesque has a fine black eye, rather bald, and black hair, and withal is rather corpulent. I was informed that he was a native of Constantinople. At present he lives in Kentucky.

Dr. Harlan is a spruce young man and has written a book.

Peale is the son of the original proprietor of the Philadelphia Museum, and one who visited the Rocky Mountains with Major Long; he is a young man, and has no remarkable indications of countenance to distinguish him. Say, who was his companion in the same expedition, is an extremely interesting man; to him I am particularly obligated for showing me their Museum and Library. I think he told me that their society had published nine volumes.... Bonaparte is the son of Lucien Bonaparte and nephew to the Emperor Napoleon; he is a little set, blackeved fellow, quite talkative, and withal an interesting and companionable fellow. He devotes his attention to ornithology and has published a continuation of Wilson's work on the above subject.... Hays, an interesting lew, delivered a lecture on mineralogy. He had collected his specimens in the Catskill Mountains. C. L. Bonaparte read a memoir on the 'Golden Plover.' To a novice it seems curious, that men of the first intellect should pay so much attention to web-footed gentry with wings.

"A Latin letter was read by *Mr. Collins* descriptive of a certain plant, growing on the waters of the Arkansaw; for my part I did not understand much of it—however it was to those who did not the less valuable." ¹

The attendance at this meeting was indeed a remarkable assemblage. As an ornithologist Bonaparte was by far the most celebrated, and though at this date he was but twenty-two years of age he had already published the first volume of his 'American Ornithology' and laid the foundations for the study of nomenclature and synonymy which has to day developed to such formidable proportions. Say and Peale both made their mark in ornithology, the former in his descriptions of the birds obtained on Long's expedition and the latter in the report on the birds of the U. S. Exploring Expedition to the South Seas. Peale was also famous as a collector, and many of the novelties described by Bonaparte owed their discovery to his energetic labors in the field.

¹ Penna. Mag. of Hist. and Biography, Vol. XVI, p. 249 (July 1892). Reference to the manuscript minutes of the Academy shows that this meeting occurred on Oct. 11. George Ord presided, and among the other members present were Dr. Godman and S. G. Morton.

Of all the participants in that meeting of 1825, however, Rafinesque stands out as the most striking character. Eccentric and egotistical to the last degree, he attempted to cover the whole field of science, history, and finance. His scientific works were for the most part ignored by his contemporaries, and in return he handled them without mercy. We can picture their mingled pity and contempt when Rafinesque wrote, "I consider myself endowed with a sagacity for the perception of generic and specific differences far in advance of any man of my time," and yet have we not to-day to a great extent the same views which he held on these matters, and are we not resurrecting many of his names which for nearly a century have been allowed to rest as the vagaries of an erratic mind?

Fortunately he touched but lightly upon ornithology, and we are spared the irritation which his numerous and abbreviated diagnoses produce in the minds of our botanists, conchologists and mammalogists.

The birds which were collected on the Long Expedition and described by Say were, as already explained, deposited in Peale's Museum and not in the Academy as has been often supposed, this action being in all probability due to the influence of Titian Peale who accompained the expedition and doubtless himself collected the specimens.

The failure to obtain the Rocky Mountain collection was not much felt at the Academy, as they soon received a far richer collection of western birds than that made by Long's expedition.

In 1834 Dr. John K. Townsend, already an active ornithologist at the Academy, undertook a journey to the mouth of the Columbia River. He was accompanied by Thomas Nuttall, who at that time was mainly interested in botany, and apparently allowed Townsend a clear field among the birds. Nuttall returned in the following year after visiting the Hawaiian Islands and California. Townsend, however, did not reach home until the close of 1836, visiting, meantime, Hawaii, some of the other Pacific Islands, and Chili.

Townsend's collection was the most important yet secured in western North America and the specimens subsequently served as the types of new species described not only by himself, but by Audubon, Nuttall, Cassin, and Titian Peale.

Some of the incidents connected with the history of this collection are very entertaining. It seems that such specimens as Townsend had secured up to the time of Nuttall's departure were sent home, in his care, at any rate they were in Philadelphia in 1836—presumably at the Academy.

Audubon learned of this and at once hastened thither, being anxious to secure the novelties for publication in his great work then well under way.

He had already seen Nuttall in Boston and obtained specimens of such new species as he had brought; apparently only *Agelaius tricolor* and *Picus nuttalli*. That Nuttall did not secure more specimens is doubtless due, as Audubon states, to the fact that "he was not in the habit of carrying a gun on his rambles"—a custom which, though it apparently did not appeal very strongly to Audubon, would win unbounded admiration from the societies which bear his name to-day.

When Audubon reached Philadelphia he was deeply disgusted because Townsend's friends quite naturally would not allow him to publish the new species which this energetic explorer had secured, thinking that they had best remain undescribed until their discoverer returned to take them in hand personally.

Notwithstanding that Audubon claimed to have very little care for priority in the naming of species, his desire to publish these birds was intense, and he says: "Having obtained access to the collection I turned over and over the new and rare species but he (Townsend) was absent at Fort Vancouver on the shores of the Columbia River, Thomas Nuttall had not vet come from Boston and loud murmurs were uttered by the soidisant friends of science, who objected to my seeing, much less portraying and describing, these valuable relics of birds, many of which had not yet been introduced into our fauna. The traveller's apetite is much increased by the knowledge of the distance which he has to tramp before he can obtain a meal; and with me the desire of obtaining the specimens in question increased in proportion to the difficulties that presented themselves." After summoning to his aid Thos. Nuttall, who had then arrived in Philadelphia, Drs. Pickering, Harlan, Morton, McMurtrie, Trudeau and Edw.

Harris, an arrangement was made whereby Audubon and Nuttall jointly were to prepare diagnoses of the new species for publication in the 'Journal' of the Academy under Townsend's name as author, after which Audubon (or Edw. Harris for him) was allowed to purchase the duplicates for use in making the plates for the 'Birds of America.'

This plan was carried out and Townsend was honored by having one of the new birds named after him, but being himself the ostensible author of the paper, he is placed in the embarrassing position of having named the bird after himself.

Most of the birds subsequently collected by Townsend seem to have gone direct to Audubon and were published by him in the 'Birds of America,' the manuscript notes of both Townsend and Nuttall furnishing most of the text.

That the treatment of these birds by Audubon was not altogether to Townsend's liking is evinced by a paper of his in the Academy's 'Journal' after his return, as well as by MS. notes in the Academy's copy of Audubon's work, wherein it appears that certain of Townsend's notes were mixed and published under the wrong birds. Matters of nomenclature also worried him, since he claims that Agelaius tricolor was Nuttall's MS. name and should have been credited to him, and that Audubon appropriated it to himself. By our present rulings on MS. names, however, I fear Nuttall would have been no better off to-day than if Audubon had acted as Townsend thought just.

The ultimate history of these types of Townsend and Audubon is interesting. The former nearly all remain at the Philadelphia Academy, while the Audubon specimens were divided, part being given to Edw. Harris and part to Prof. Baird. Subsequently these were presented, respectively, to the Philadelphia Academy and the National Museum.

This collection was the first notable contribution to the Academy's cabinet. By 1837, however, it contained about 1000 specimens, and in the succeeding ten years about 550 more were added. The ornithologists who appeared on the field during this period were John Cassin, S. F. Baird, A. L. Heermann, William Gambel, and S. W. Woodhouse.

¹ Preface to the fourth volume of the 'Ornithologicial Biography.'

In 1846 the collection attracted the interest of a man who, as a patron of ornithology, did more to advance the science in America than any other individual, but who, owing to his extreme modesty and aversion to publishing the results of his researches is very little known to-day outside of the Academy. This was Thomas B. Wilson, a wealthy member of the institution and afterwards its President. By his great liberality the Academy's collections in many departments were largely increased, and the library was rendered as complete as it was possible to make it. It was in ornithology, however, that he became especially interested. Through the agency of his brother, Edward Wilson, residing in London, he entered into negotiations with a prominent taxidermist of that city to furnish him with birds in lots of 100 at so much a piece, the price to vary with each lot in accordance with the rarity of the species.

Before closing the bargain, however, he asked the advice of Dr. J. E. Gray of the British Museum and was strongly recommended to purchase some large collection entire as a much more economical investment. Dr. Gray further suggested the collection of Victor Massena, Duc di Rivoli and Prince d'Esling, which was then in the market, and finally agreed to do his best to negotiate the purchase, as he was at that time about to visit Paris. His results are best told in his own words:

"On my arrival in Paris, I put up at Meurice's, and at once sent a messenger with a note to the Prince Massena, saying that I was willing to purchase the collection of birds at the rate of four francs per specimen, and that I was prepared to pay for it in ready money. While sitting at dinner at the table d'hote, an aide-de-camp came in, all green and gold, with a cocked hat and a large white feather, to inquire for me, with a message from the Prince to inquire what I intended by ready money, and, when I explained, to inquire if I was ready to pay the sum (50,000 francs) that evening. I said no, that I had only just arrived in Paris and had not delivered my letter of credit to the banker, but I would be ready to pay as soon as the bank opened the next morning. He said the bank opened early, and would I come to the prince at seven o'clock? to which I assented. I immediately sent my letter of credit to Messrs. Green, and mentioned

the sum that I should draw for early the next morning. I kept my appointment, the prince met me, declared the collection agreed with the catalogue, on which I gave his highness a cheque on Messrs. Green and he gave me a receipt and handed me the keys of the cases, and I sealed them up, the affair being settled in a few minutes.

"Having finished my work sooner than I expected, and it still being early, I went to call on my dear old friend Prof. DeBlainville and had breakfast with him. He asked me what brought me to Paris. I said, among other things, to purchase the Prince Massena's Collection of Birds, which I had done; on which he became much excited and said that the French Government had intended to purchase it and that he must take measures to prevent its leaving France. I said I was not aware that the Government wanted it for I knew it had been for several years in the market, and it was now too late, as I had paid for the collection, which was now in my possession, and I showed him the keys of the cases and the receipt for the money. At length my good and kind friend became pacified." 1

This collection comprised some 12,500 specimens, and its acquisition, as Thoreau 2 says, "by a Yankee, over all the crowned heads of Europe," was greatly to the credit of American energy and enterprise.

Dr. Wilson followed this purchase with that of the Gould collection of Australian Birds, and the Boys Indian collection, besides securing many small collections, so that when the whole was formally presented to the Academy it comprised about 26,000 specimens, including some 600 types of Gould, Cassin, Bonaparte, Temminck, Lafresnay, Vieillot, Lesson, Smith, Sclater, Verreaux, and Strickland.

Such a collection as this, brought together at such an early date, was indeed wonderful, and though John Cassin worked at it until the time of his death, and described some 200 new species, there remained probably several hundred doubtfully named birds

¹ Annals and Magazine of Nat. Hist., 1869, Vol. III, p. 317.

² Journal, Nov. 21, 1854, after a visit to the Academy.

which subsequent and more extended collections have shown to be distinct species.

Cassin has been justly termed by Dr. Coues "the only ornithologist this country has ever produced who was as familiar with the birds of the Old World as with those of America," but the opportunity of attaining the great knowledge which he possessed was offered by the liberality of Thomas B. Wilson.

Had Dr. Wilson endowed his famous collection sufficiently to have ensured a permanent curator, Philadelphia's ornithological history would have gone on without a break, but as it was, the death of Cassin in 1869, marked the close of active work, and for twenty years the collection remained almost untouched by ornithologists. There arose a new generation of bird students, the 'Bulletin' of the Nuttall Club appeared, the A. O. U. was organized, and meantime the Philadelphia collection was all but forgotten. Many specimens were there which would have been of the greatest interest to the contributors to the 'Nuttall Bulletin' and the early numbers of 'The Auk'; though much of their importance has been lost to-day owing to the systematic collecting in every part of our country, whereby many of the great rarities of past years have become familiar to all.

Though it be stretching my theme unduly, I may be permitted to add that the collection is still in a remarkably good state of preservation, and that scarcely any of the types have been lost, while to the 26,000 specimens of old, the past ten years have added 18,000 more.

It was not my intention to speak of all the ornithologists or all the individual collections which have come to Philadelphia, and I will not therefore weary you with more details, but in closing I must make some allusion to a small collection of skins which came to the Academy during the past year as a part of the legacy of the late Edward D. Cope. This was a collection formed by Bernard Hoopes, and included the celebrated series of Warblers formerly the property of Chas. S. Turnbull, author of the 'Birds of East Pennsylvania and New Jersey,' both of these collectors being contemporaries of Cassin.

This Warbler collection was considered the finest in existence in Turnbull's time and contains such rarities as the Olive,

Hermit, and Swainson Warblers. There is also the specimen of Townsend's Warbler from Chester Co., Pennsylvania, the only one taken east of the Rocky Mountains, which passed through several hands, selling for fabulous prices. There is also an Ipswich Sparrow, obviously secured long before the type was obtained.

In contemplating these specimens which have reposed in their old cabinet for nearly 30 years untouched by the hands of ornithologists, their antiquated labels oblivious to the edicts of the A. O. U. committee on nomenclature, one seems to be almost in touch with the past generation. Besides those I have mentioned are some Philadelphia Vireos and other birds collected by Prof. Cope at the time he was just starting upon his scientific career and presented by him to Turnbull. One cannot but wonder what would have been the outcome had Prof. Cope in later years continued to turn his attention to ornithology instead of neglecting it, as he did almost entirely.

I recall one instance; some two years before his death, when I was engaged in systematizing a heterogeneous collection of birds he entered the room and in the course of conversation took exception to some of the characters used in their classification. "What you want," he said, "are alcoholic specimens; then you can get at their proper relationships;" and added, with a smile, "some day perhaps I shall get at the birds and straighten them all out." But other fields continued to demand his attention and Philadelphia was prevented from adding his name to her already long list of notable ornithologists.

GENERAL NOTES.

Thalassidroma castro of Harcourt. — Now that the question of *Thalassidroma castro vs. Oceanodroma cryptoleucura* has been brought up by Mr. Grant in 'The Ibis,' and passed upon, as far as the A. O. U. 'Check-List' is concerned, by the A. O. U. Committee on Classification, ornithologists may wish to consult the original description, which will be more generally accessible if reprinted in 'The Auk.' It is as follows: 'It differs from Leach's petrel, to which it is closely allied, in being larger;